Specification Amendments

Please replace the paragraphs beginning at page 7, line 11, and ending at page 8, line 18, with the following rewritten paragraphs:

--Moreover, a peptide sequence was characterized from the simian virus SV 40 that comprises a nuclear localization signal (NLS). The presence of such signal sequences that are necessary for the import of protein into the cellular nucleus, is known from several organisms. Molecules larger than 60kDa can only be transported into the cellular nucleus by such nuclear localization sequence. In particular, it was demonstrated for the SV-40 NLS that proteins up to 465 kDa can be directed to the nucleus (Lanford et al. 1986, Cell 15; 46 (4): 575-82). This ability of the peptide was utilized here for improving gene transfer. The peptide sequence used is PKKKRKV (SEQ ID NO. 4).

The method to produce such nucleic acid constructs for transcription of RNA molecules in a cell or a complex of cells is based on EP 0 941 318 B1, where the nucleic acid construct

- is formed by a circular strand of deoxyribonucleic acid

with a base sequence that is partially complementary to the respective other strand and anti-parallel, resulting in a construct shaped like a dumbbell,

- where the base sequence that is partially complementary to the respective other strand and anti-parallel, consists mainly of a promoter sequence, a coding sequence and either a polyadenylation signal or another RNA stabilizing sequence element,
- and the non-complementary base sequence forms two loops (hairpin loops) comprising single stranded deoxynucleic acid, linking the 5'- and the 3' end of the base sequence that is partially complementary to the respective other strand and anti-parallel,

where

- the hairpin loop is formed by at least one of the following oligonucleotides (ODN 1 or ODN 2)

ODN 1: 5'-PH-GGG AGT CCA GT XT TTC TGG AC (SEQ ID NO. 5)

ODN 2: 5'-PH-AGG GGT CCA GTT TTC TGG AC, (SEQ ID NO. 6)

where X signifies an amino residue modified activated nucleoside residue (thymine),

- and an organic molecule is covalently attached to this hairpin loop by means of a crosslinking molecule.--

Please replace the paragraphs beginning at page 22, line 21, and ending at page 23, line 1, with the following rewritten paragraphs:

--A further feature or aspect of an embodiment is believed at the time of the filing of this patent application to possibly reside broadly in the use of the DNA expression construct, where the oligopeptide comprises the sequence PKKKRKV (proline - lysine - lysine - lysine - arginine - lysine - valine) (SEQ ID NO. 4).

Another feature or aspect of an embodiment is believed at the time of the filing of this patent application to possibly reside broadly in the use of the DNA expression construct, where the oligopeptide comprises the sequence YGRKKRRQRRR (SEQ ID NO. 3).--

Please replace the paragraph beginning at page 27, line 20, and ending at page 28, line 16, with the following rewritten paragraph:

--All of the patents, patent applications or patent publications, which were cited in the international search report dated September 11, 2003, and/or cited elsewhere are hereby incorporated by reference as if set forth in their entirety herein as follows: SCHIRMBECK REINHOLD ET AL, "Priming of immune responses to hepatitis B surface antigen with minimal DNA expression constructs modified with a nuclear localization signal peptide," JOURNAL OF MOLECULAR MEDICINE (BERLIN), Bd. 79, Nr. 5-6, ~~Juni~~ June 2001 (2001-06); MCCLUSKIE M J ET AL, "ROUTE AND METHOD OF DELIVERY OF DNA VACCINE INFLUENCE IMMUNE RESPONSES IN MICE AND NON-HUMAN PRIMATES", MOLECULAR MEDICINE, BLACKWELL SCIENCE, CAMBRIDGE, MA, US, Bd. 5, Nr. 5, Mai 1999 (1999-05); SHI NING ET AL, "Immune responses affected by different injection methods of a multi-epitope chimeric DNA vaccine of Plasmodium falciparum," ZHONGHUA WEISHENGWUXUE HE MIANYIXUE ZAZHI, Bd. 21, Nr. 1,

~~Januar~~ January 2001 (2001-01); EP O 941 318 A (SOFT GENE GMBH) 15. September 1999 (1999-09-15); LOPEZ-FUERTES L ET AL, "DNA vaccination with linear minimalistic (MIDGE) vectors confers protection against Leishmania major infection in mice" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, Bd. 21, Nr. 3-4, 13. ~~Dezember~~ December 2002 (2002-12-13); and "Form Follows Function: Introduction to the MIDGE Vector Technology," INTERNET PUBLICATION, 'Online! 31. ~~Mai~~ May 2002 (2002-05-31), XP002252259 ~~Gefunden im Internet: <URL:http://web.archive.org/web/20020602141807/www.midge.com/technology/index.html>~~.--

Please replace the paragraph beginning at page 29, line 21, and ending at page 30, line 3, with the following rewritten paragraph:

--The following U.S. Patent Applications are hereby incorporated by reference as if set forth in their entirety herein: Serial No. 10/057,311, filed January 24, 2002, entitled "Covalently Closed Nucleic Acid Molecules for Immunostimulation," and having inventors Junghans, et al. and attorney docket no. NHL-NP-37; Serial No. 10/041,672, filed

January 8, 2002, entitled "Feline Interleukin-12 as Immunostimulant," and having inventors Lutz, et al. and attorney docket no. NHL-NP-36; and Serial No. 10/816,591 _____, filed April 1, 2004, entitled "DNA Expression Construct for Treatment of Infections with Leishmaniasis," and having inventors Laura FUERTES-LÓPEZ and Marcos TIMÓN-JIMENÉZ and attorney docket no. ~~NHL-NP-46,~~ NHL-NP-46.--

Please replace the abstract currently on file with the new abstract submitted herewith on a separate sheet.